



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,926	09/04/2003	Naoki Hashimoto	Q77274	3647

23373 7590 01/14/2008
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

ZEWDU, MELESS NMN

ART UNIT	PAPER NUMBER
----------	--------------

2617

MAIL DATE	DELIVERY MODE
-----------	---------------

01/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/653,926

Applicant(s)

HASHIMOTO ET AL.

Examiner

Meless N. Zewdu

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the communication filed on 12/12/07.
2. Claims 9-17 and 19-25 have been cancelled.
3. Claims 1-8 and 18 are pending in this action.
4. The following informalities were detected, regrettably overlooked, in previous actions.

The indicated allowability of claims 1-4 is withdrawn in view of the newly discovered reference(s) , as indicated/provided in the rejection of the claims in question below. Rejections based on the newly cited reference(s) follow.

Claim Objections

Claim 1 is objected to because of the following informalities: on line 14 (at the last line of the claim), "the packet" should read --- **the packets**. Appropriate correction is required.

Claim 2 is objected to because of the following informalities: "base station equipment", on lines 4 and 6, should be reading as --- base station, since there is antecedent basis for "said base station equipment". Appropriate correction is required.

Claim 3 is objected to because of the following informalities: "a capsulated packet", on line 3 should be changed into "the capsulated packets",

so as to conform with the precedence provided in claim 1. . Appropriate correction is required.

Claim 4 is objected to because of the following informalities: "a capsulated packet" and "the number" on line 3 should be changed into "the capsulated packets" and "a number" respectively. Appropriate correction is required.

Claim 4 is objected to because of the following informalities: claim 4 is confusing, particularly the text on line 3. Furthermore, "the number", on line 3 and "the resultant", on line 4, do not have antecedent basis in claim 1. Appropriate correction is required.

Claim 6 is objected to because of the following informalities: the word "every" should be canceled from the phrase "every said base station" on line 4. Appropriate correction is required.

Claim 6 is objected to because of the following informalities: "packet" on line 9 should be changed into --- packets.. Appropriate correction is required.

Claim 6 is objected to because of the following informalities: the phrase, "as they are if not so" should be rephrased clearly or be canceled.. Appropriate correction is required.

Claim 7 is objected to because of the following informalities: "the state" on lines 5-6, should be changed into "a state" and "the value" on line 6, should be changed into "a value", since antecedence is lacked in both cases.. Appropriate correction is required.

Claim 18 is objected to because of the following informalities: "packet" on lines 8, 9 and 10, should be changed into --- packets. Appropriate correction is required.

Claim Rejections - 35 USC § 103

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seppala et al. (Seppala) (US 6,747,968 B1) in view of Sharma et al. (Sharma) (US 2003/0031151 A1)..

As per claim 1: Seppala discloses a wireless LAN system (see abstract) comprising:

a base station/AP (access point) (see fig. 3, element 14);

at least one wireless LAN terminal connected to said base station (AP) via a wireless LAN (see fig. 3, element 48);

a packet transmission system for transmitting a packet between said base station/AP and said at least one wireless LAN terminal via the LAN (see fig. 3; col. 5, lines 6-60); said packet transmission system comprising:

sorting means for sorting received packets into prioritized packets (real time data) and non-prioritized packets (best effort data) (see col. 3, lines 37-65, particularly lines 42-46);

accumulating means for accumulating the prioritized packets sorted by said sorting means (see col. 3, lines 46-49). But, Seppala does not explicitly teach about capsulating/encapsulating means for capsulating/encapsulating the packets accumulated in said accumulating means and transmitting means for

transmitting the packets encapsulated by said encapsulating means, as claimed by applicant. However, in the same field of endeavor, Sharma teaches about packet transmission in a wireless LAN communication system wherein a Home agent intercepts/receives packets destined to a MN device in its home network and forwards them to the MN's current point of attachment by "tunneling" the packets to the MN care-of address by encapsulating the original IP packet in another IP packet destined to the MN's care-of address (see paragraph 0011). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the teaching of Seppala with that of Sharma for the advantage of forwarding packets to a MN using the IP protocol when the mobile MN changes its current point of attachment.

As per claim 2: Seppala teaches about a wireless LAN system, wherein said packet transmission system further comprises arbitration means for transmitting delay request information for delaying transmission of packets from said base station equipment to said wireless LAN terminal such that the packet transmission does not overlap with other terminals, thereby arbitrating transmission of packets from said wireless LAN terminal to said base station equipment so as not to cause a collision thereof (see fig. 4; col. 2, lines 47-67; col. 3, lines 37-65; col. 5, line 61-col. 6, line 9; col. 6, line 65-col. 7, line 16).

As per claim 3: Seppala teaches about a wireless LAN, wherein said wireless LAN terminal is associated with a PCF mode (see col. 5, lines 36-42, 55-60; col. 6, lines 9-20), and said base station sets a NAV time and gives timing provided to transmit (see col. 1, lines 50-58; col. 2, lines 21-27). When the references are

combined as shown in the rejection of claim 1 above, the packets transmitted to the wireless LAN would be capsulated/encapsulated as taught by Sharma.

As per claim 4: Seppala teaches about a wireless LAN system, wherein said packet transmission system further comprises means for adjusting a period for transmitting a capsulated packet according to the number of real time sessions active via said base station (see col. 2, lines 16-27).

Allowable Subject Matter

Claim 1-88 is allowed.

The following is an examiner's statement of reasons for allowance:

As per claim 18: the prior art of record does not teach or fairly suggest transmitting means for transmitting a packet capsulated by a capsulating means, wherein said transmitting means transmits the capsulated packet in matching with a CODEC period, the transmitting means transmitting the capsulated packet in a period that is less or equal to a CODEC period T, as recited in claim 18.

Claims 5-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meless N. Zewdu whose telephone number is (571) 272-7873. The examiner can normally be reached on 8:30 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Appiah Charles can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

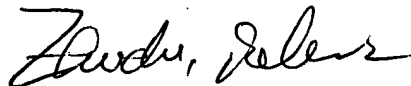
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number:
10/653,926
Art Unit: 2617

Page 8

Any inquiry of a general nature relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Meless Zewdu

A handwritten signature in black ink, appearing to read 'Zewdu, Meless', written in a cursive style.

Patent examiner

08 January 2008.